

**Harvatek International 5mm Super Bright Through Hole Lamp  
HV-8B50-3778**

Official Product	HV-8B50-3778	Customer Part No.	Data Sheet No.
	*****	*****	HV-8B50-3778
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	Oct.12, 2011	Version of 1.2	Page 1/7

## Orderable Information

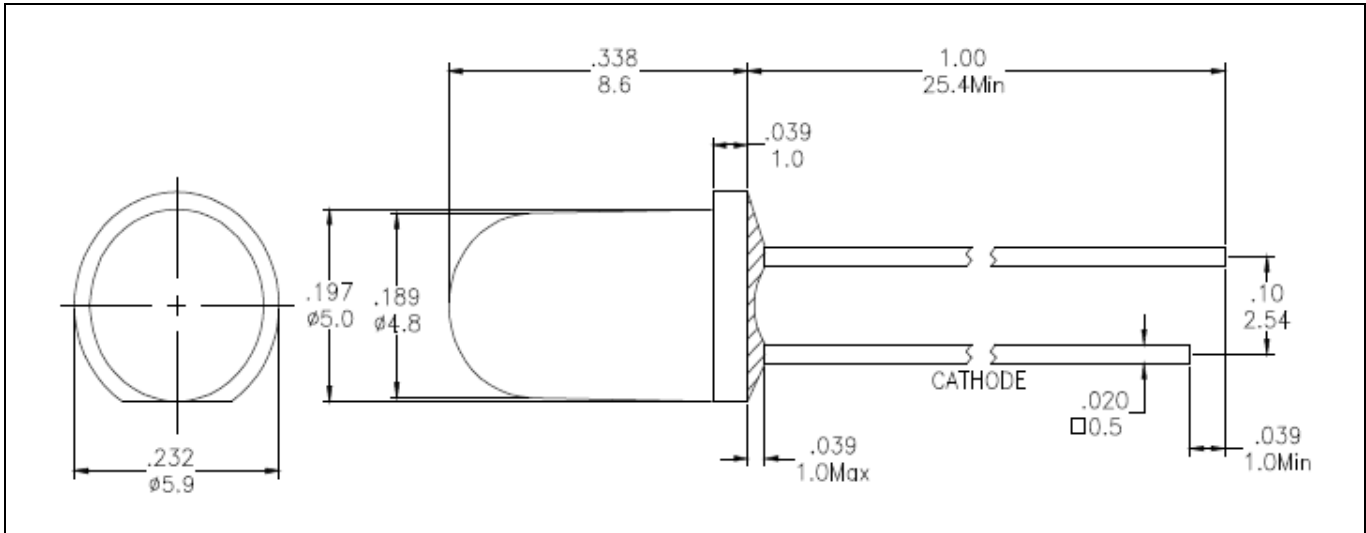
**H V - 8 B 5 0 - 3 7 7 8**

Series Name	Color Code	Customer Code
<b>HV :</b> Harvatek Vertical Round Led Lamp	<b>8B50 :</b> 5mm Through-hole Lamp, Blue 50 Viewing Angle	<b>3778 :</b> Customer Product Code

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## Features:

- Stable Color
- Popular 5mm through hole package, 8.6mm lens height.
- Water Clear lens
- InGaN technology
- Solid state reliability



Notes :

- 1.All Dimensions are in millimeters
- 2.Tolerance = +/- 0.25mm unless otherwise noted

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## Absolute Maximum Rating (@ 25°C)

Parameter	Symbol	Spec	Unit
Power Dissipation	P <sub>d</sub>	108	mW
Reverse Voltage	V <sub>r</sub>	5	V
Forward Current	I <sub>f</sub>	30	mA
Peak Current ( 1/10 Duty Cycle, 0.1ms pulse width )	I <sub>F</sub> (Peak)	100	mA
Operating Temperature Range	T <sub>opr</sub>	-30 to +80	° C
Storage Temperature Range	T <sub>stg</sub>	-40 to +100	° C
Lead Soldering Temp	-	260	° C

## Electrical and Optical Characteristics (@ 25°C)

Parameter	Symbol	HV-8B50-3778			Test Condition
		min	typ.	Max	
Luminous Intensity (mcd)	I <sub>v</sub>	680	-	850	I <sub>F</sub> =20mA
Forward Voltage (V)	V <sub>F</sub>	-	3.0	3.6	I <sub>F</sub> =20mA
Dominant Wavelength(nm)	λ <sub>d</sub>	-	468	-	I <sub>F</sub> =20mA
Reverse(Leakage) Current	μA	-	-	50	V <sub>r</sub> =5V
Viewing Angle (deg)	2θ 1/2	-	50	-	I <sub>F</sub> =20mA

Brightness tolerance = +/- 15%

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### Luminous Intensity Rank Limits(If=20mA)

Code \ Part NO	HV-8B50-3778	
	Min	Max
26	680	750
27	750	850
28	850	1000

### Dominant Wavelength Rank Limits(If=20mA)

Code \ Part NO	HV-8B50-3778	
	Min	Max
B5	460	465
B6	465	470
B7	470	475

### Forward Voltage Rank Limits(If=20mA)

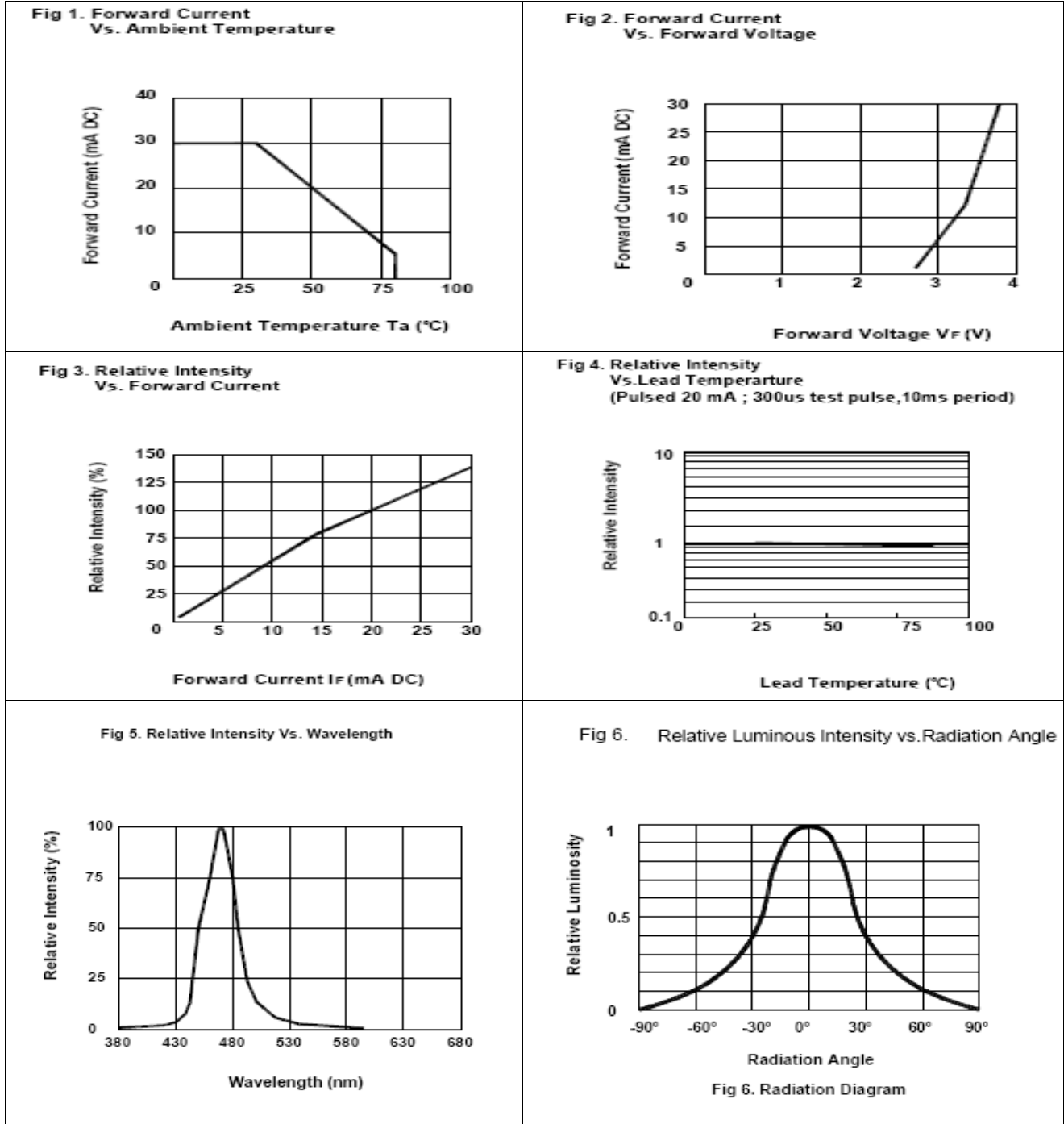
Code \ Part NO	HV-8B50-3778	
	Min	Max
H	2.8	3.0
J	3.0	3.2
K	3.2	3.4
L	3.4	3.6

Notes:

- |  |         |
|--|---------|
| 1. Tolerance of measurement of luminous intensity  | :±15%   |
| 2. Tolerance of measurement of Dominant Wavelength | :±2nm   |
| 3. Tolerance of measurement of forward voltage     | :±0.05v |

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## Typical Characteristic Curves (@ 25°C)



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## Revision History

Changes since last revision	Page	Version No.	Revision Date
New Format		1.0	12-08-2010
Brightness Specification Changes		1.1	03-31-2011
Add 28 bin code		1.2	10-12-2011

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